

# Vulcano Workshop 2022 - Frontier Objects in Astrophysics and Particle Physics



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## Cosmic ray transport in interstellar turbulence

*Wednesday, 28 September 2022 17:25 (25 minutes)*

Cosmic ray propagation is determined by the properties of interstellar turbulence. The multiphase nature of ISM and diversity of driving mechanisms give rise to spatial variation of turbulence properties. A new chapter of CR propagation research has begun when studies of particle transport and interstellar turbulence can confront each other. I shall report our current understandings of interstellar turbulence and particle transport. Both theoretical and observational studies will be presented. Different regimes of particle transport, e.g., diffusion vs. superdiffusion, isotropic vs. anisotropic diffusion, will be discussed in relation to turbulence properties.

**Primary author:** YAN, Huirong

**Presenter:** YAN, Huirong

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